



COUNTY OF SAN DIEGO  
**Great Government Through the General Management System – Quality, Timeliness, Value**  
DEPARTMENT OF HUMAN RESOURCES

CLASS SPECIFICATION

CLASSIFIED

CONSTRUCTION TECHNICIAN

Class No. 003795

■ CLASSIFICATION PURPOSE

To perform and/or supervise engineering work in connection with construction, inspection, maintenance and operation of the public infrastructure; may supervise technicians and engineering personnel engaged in such work; and to perform related work as required.

■ DISTINGUISHING CHARACTERISTICS

The Construction Technician is a lead or first-line supervisory class that does not require licensing as a professional engineer. Under general supervision, this class works with professional engineers and/or project managers as well as coordinates and directs other paraprofessional staff in the fields of civil engineering, construction, grading, operation, and maintenance of public infrastructure in the application, interpretation, and enforcement of regulatory requirements as assigned. The Construction Technician differs from the Civil Engineer class, in that the latter is registered as a Professional Engineer and has the authority to sign-off on plan modifications.

■ FUNCTIONS

**The examples of functions listed in the class specification(s) are representative but not necessarily exhaustive or descriptive of any one position in the class(es). Management is not precluded from assigning other related functions not listed herein if such functions are a logical assignment for the position.**

Capital Improvement Projects Inspector:

Essential Functions:

1. Performs engineering duties on large and complex construction contracts for Capital Improvement Projects.
2. Responsible for contract administration of construction contracts and purchase orders.
3. Reviews planned project to determine if they are constructible.
4. Conducts pre-construction conference(s) and coordinates the start of project work.
5. Ensures submittals required in the contract are submitted by contractors and approved prior to start of the work.
6. Inspects work in progress for quality assurance and adherence to contract plans and specifications; interprets plans and specifications of contractors.
7. Monitors and tracks the contract timelines and funding.
8. Directs the work of subordinate engineers or technicians including consultants assigned to the project.
9. Monitors implementation of contractor's Storm Water Pollution Prevention Plans (SWPPP) and/or Water Pollution Control Program (WPCP) and initiates enforcement action when necessary.
10. Initiates, investigates, negotiates and prepares backup calculations and contract change orders.
11. Coordinates and oversees sampling and testing of materials used.
12. Ensures that contractors implement and maintain required safety and traffic control plans.
13. Ensures that affected property owners and other appropriate agencies are notified prior to start of work and proper access is maintained to private properties by the contractor at all times.
14. Initiates, prepares, organizes and maintains a record of required project diaries, stormwater inspection reports, weekly statement of working days, correspondence, and progress photos. Also, maintains and organizes required project diaries, pay authorizations, correspondence, and other required project documentation.

15. Monitors, verifies, makes field measurements, prepares quantity calculations, and prepares progress payment sheets for various items of work and change orders for purposes of authorizing payments.
16. Reports all unresolved contract issues and claims to supervisor in a timely manner.
17. Coordinates services of other DPW units for the project.
18. Enforces Labor Code and subcontracting requirements for project.
19. Conducts work in accordance with the project's Code of Safe Practices (COSP); conducts and/or attends safety meetings no less frequently than every ten days.
20. Ensures that the contractor has obtained all necessary permits for the project and complies with the requirements of all permits and environmental conditions for the project.
21. Assists in defense of claims against the County by contractors.
22. Coordinates, conducts and documents final inspection and acceptance of the work.
23. Prepares final reports and conducts post construction meetings with Project Managers and Designers.
24. Prepares and submits documented changes to project plans and signs the final record drawings.
25. Provides responsive, high quality service to County employees, representatives of outside agencies and members of the public by providing accurate, complete and up-to-date information, in a courteous, efficient and timely manner.

Private Development Inspector:

Essential Functions:

1. Monitors and approves grading and infrastructure construction required for major and minor subdivisions, and other development projects.
2. Monitors implementation of contractor's storm water pollution prevention plans and initiates enforcement action when necessary.
3. Inspects subdivision construction work, including but not limited to vertical and horizontal alignments for public and private improvements, erection of concrete forms and falsework, placement and fabrication of structural steel, fabrication and placement of reinforcing steel, installation of required fencing and protective barricades, storm drains, utility systems, and placement and curing of concrete, and asphaltic concrete paving operations.
4. Enforces compliance with plans, specifications, use permits, County standards and proper construction practices for work including but not limited to installation of gas and water lines, sewers, utility conduits, construction of storm drains, culverts, flood control channels, catch basins, junction structures, curbs, gutters, sidewalks, and driveways.
5. Inspects grading work being performed under permit from the County and enforces compliance with approved grading plans, specifications, soil and engineering geology report recommendations and County grading and excavation Code.
6. Verifies proper field compaction and coordinates material testing.
7. Prepares inspection reports for many different types of private development and public improvement projects.
8. At project closeouts stipulates corrective actions and repairs necessary before final acceptance by the County.
9. Insures proper placement and maintenance of traffic signs, barricades and warning devices in accordance with approved traffic control plans and/or improvement plans.
10. Coordinates with other agencies to insure that necessary signoffs and inspections by others have been completed prior to releasing projects.
11. Ensures that record drawings have been completed and submitted in accordance with County of San Diego requirements and policies.
12. Performs routine grading plan checks.
13. Investigates complaints and hazardous conditions.
14. Deals with affected property owners and their agents.

15. Monitors financial accounts of various projects to ensure that the County is properly reimbursed for required inspection services performed.
16. Provides responsive, high quality service to County employees, representatives of outside agencies and members of the public by providing accurate, complete and up-to-date information, in a courteous, efficient and timely manner.

#### ■ KNOWLEDGE, SKILLS AND ABILITIES

##### Knowledge of:

- Arithmetic computation applicable to technical or civil engineering work involved in construction of public works projects.
- The theory and practice of engineering design, construction and inspection procedures required for public works improvement projects.
- County, state, and federal construction and safety regulations and standards for public works projects.
- Techniques and methods to review and evaluate work of subordinates.
- Methods and techniques to originate and check design, details, estimates, plans and specifications.
- Methods and techniques to meet and consult with engineers and contractors.
- County customer service objectives and strategies.

##### Skills and Abilities to:

- Apply established engineering formulas, theory and practice to practical engineering problems .
- Communicate effectively, both orally and in writing.
- Extract engineering data from various sources and process or compile such data using specified formulas and procedures.
- Prepare reports, perform calculations, and documentation utilizing computers.
- Develop spread sheets and other project support software.
- Establish effective working relationships with management, employees, employee representatives and the public representing diverse cultures and backgrounds.
- Treat County employees, representatives of outside agencies and members of the public with courtesy and respect.
- Assess the customer's immediate needs and ensure customer's receipt of needed services through personal service or referral.
- Exercise appropriate judgment in answering questions and releasing information; analyze and project consequences of decisions and/or recommendations.

#### ■ EDUCATION/EXPERIENCE

Education, training, and/or experience that demonstrates possession of the knowledge, skills and abilities listed above. Examples of qualifying education/experience are:

1. At least six (6) years of experience involving the application of civil engineering formulas, theory, and practices to practical engineering problems of modern construction methods, design and inspection procedures, in connection with public works improvement projects; OR,
2. A Bachelor's degree in Civil Engineering or a closely related field from a recognized, four-year educational institution; AND, four (4) years of experience involving the application of civil engineering formulas, theory, and practices to practical engineering problems of modern construction methods, design and inspection procedures, in connection with public works improvement projects.

#### ■ ESSENTIAL PHYSICAL CHARACTERISTICS

**The physical characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of the classification(s). Reasonable accommodation may be made to enable an individual with qualified disabilities to perform the essential functions of a job, on a case-by-case basis.**

Continuous upward and downward movement of the neck. Frequent: sitting, repetitive use of hands to operate computers, printers and copiers. Walking, standing, bending and twisting of neck, bending and twisting of waist, squatting, simple grasping, reaching above and below shoulder level, and lifting and carrying of objects weighing up to 35 pounds. Walk long distances, walk up and down slopes, climb ladders, work around construction equipment and in adverse weather conditions.

#### ■ SPECIAL NOTES, LICENSES, OR REQUIREMENTS

##### License

A valid California class C driver's license, which must be maintained throughout employment in this class, is required at time of appointment. Employees in this class may be required to use their own vehicle.

Certification/Registration

None Required.

Working Conditions

Field and Office environments; work includes being around various types of construction vehicles and materials. Night and weekend work and after hour and emergency response may be required.

Background Investigation

Must have a reputation for honesty and trustworthiness. Misdemeanor and/or felony convictions may be disqualifying depending on type, number, severity, and recency. Prior to appointment, candidates will be subject to a background investigation.

Probationary Period

Incumbents appointed to permanent positions in this class shall serve a probationary period of 6 months (Civil Service Rule 4.2.5).

**New: April 9, 1976**  
**Revised: Spring 2003**  
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**Revised: June 9, 2004**